

REMARKS/ARGUMENTS

Reconsideration and allowance of this application are respectfully requested.

Currently, claims 1-21 and 27-34 are pending in this application.

Rejections Under 35 U.S.C. §102 and §103:

Claims 1, 3-7, 10, 12-13 and 16-21 were rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Horn et al (U.S. '049, hereinafter "Horn"). Applicant respectfully traverses this rejection.

For a reference to anticipate a claim, each element must be found, either expressly or under principles of inherency, in the reference. Each element of the claimed invention is not found in Horn. For example, Horn fails to disclose "each multichannel audio connection comprising a plurality of individual audio channels, and each of the plurality of terminal equipments receiving the individual audio channels through a respective one of the multichannel audio connections, each of the terminal equipments having means to separately process each received audio channel to provide a plurality of outputs, each output representing one of the other terminal equipments," as required by independent claim 1. Similar comments apply to independent claim 3. Horn also fails to disclose "in which each of the plurality of terminal equipments receives the individual audio channels through a respective one of the multichannel audio connections and processes each received individual audio channel separately to provide a plurality of outputs, such output each representing a respective one of the other terminal equipments," as required by independent claim 10. Similar comments apply to independent claim 12. Finally, Horn fails to disclose "each of the plurality of terminal equipments receiving the individual independent monaural channels through a respective one of the multichannel

connections, each of the terminal equipments having means to separately process each received individual independent monaural channel to provide a plurality of outputs, each output representing one of the other terminal equipments,” as required by independent claim 16. Similar comments apply to independent claim 17.

Horn discloses a conference bridge 108. The conference bridge 108 includes an audio mixer 296. Audio signals “are applied to audio mixer 296 where they are mixed in a conventional manner such that the audio transmitted back to each terminal consists of the audio generated at all or some of the other terminals of the conference.” (See col. 4, lines 53-58). A mix of audio signals received by one terminal may therefore omit input from at least one of the terminals. However, these terminals cannot “unmix” these signals. That is, a terminal which receives the mixed signal from audio mixer 296 (which mixes audio signals in a “conventional manner”) cannot “unmix” this received signal. Accordingly, Horn fails to disclose “each of the terminal equipments having means to separately process each received audio channel to provide a plurality of outputs, each output representing one of the other equipments,” as required by independent claim 1.

Horn discloses multiple channels, but what Horn does not disclose is the capability of providing a plurality of outputs, each representing one of the other terminal equipments. As discussed above, a terminal equipment which has received a mixed signal from audio mixer 296 cannot “unmix” this received signal to separately process each received audio channel to provide a plurality of outputs.

Through the above-noted claim limitations, an end user may be provided control of certain capabilities. For example, a user at a terminal may select which audio channel, or audio channels, are to be output at the user terminal. (See, e.g., dependent claim 7). As a more particular example, two sources of audio may include an original speaker and

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a simultaneous translation. The user at the user terminal may wish to listen to the original speaker, the translation, or even perhaps both. Such a capability, if possible in Horn at all, would be controlled at the bridge. Instead, the above-noted claim features allow capability to be under the control of the user at the user terminal.

Independent claim 3 requires, *inter alia*, “wherein the conference bridge comprises a concentrator, having means to identify the currently active input channels, and to transmit only those active channels over the multichannel audio connections as the plurality of individual audio channels, together with control information identifying the transmitted channels (emphasis added).” Independent claim 12 requires a similar feature.

Page 4 of the Office Action alleges that col. 10, lines 12-29 of Horn discloses this claim limitation. Applicant respectfully disagrees. Col. 10, lines 12-29 of Horn states the following (emphasis added):

“As noted above, various embodiments of the present invention monitor the voice energy of an audio signal to determine whether silence or active speech is occurring. The amount of time a channel must be inactive to be considered “silent”, and the amount of time a channel must be active to be considered “speech” are two separate parameters to be considered. According to an embodiment of the present invention, the parameters of the curve depicted in FIGS. 3A and 3B are predefined. However, it is possible to allow a user of the terminal to custom control the parameters of the curve depicted in FIGS. 3A and 3B, to allow each user to selectively tailor the curve to his particular use. In addition, it is also possible to adaptively set the parameters based on an event or events. For example, it may be desirable to change audio delay quickly (e.g., increase the slope of the curve in FIG. 3A), if a large number of floor changes is occurring, in order to accelerate the process of entering the monologue state.”

This passage of Horn discloses enabling a user at a terminal to control certain parameters. However, providing user control of certain parameters at a terminal clearly does not provide a teaching of the conference bridge transmitting control information

identifying transmitted channels along with those active channels over a multichannel audio connection.

Dependent claims 20 and 21 require a demultiplexer for separating the individual audio channels received through a respective one of the multichannel audio connections.

Page 3 of the Office Action alleges that col. 4, lines 15-29 of Horn discloses this limitation. Applicant respectfully disagrees. Col. 4, lines 15-29 of Horn states the following (emphasis added):

“In the receive path of terminal 220, multiplexed audio/video data is received by demultiplexer 255 where it is demultiplexed such that audio data is provided on line 257 and video data is provided on line 259. The receive audio data is applied to variable audio delay unit 260’, which delays the audio by an amount controlled by controller 260’. Controller 260’ monitors the audio signal energy to determine an appropriate amount of delay. Preferably, the audio energy is monitored via line 262 before the delay, or alternatively, via line 264. The delayed audio is decoded by audio decoder 270 and then converted to sound by speaker 272. In the video path, the video data on line 259 is decoded by video decoder 280 and then displayed by display 282. It is noted that in some cases it may be easier to place the audio decoder before the variable delay and monitor/controller.”

The demultiplexer 255 described in this section of Horn merely demultiplexes a combined video signal and audio signal into component parts which are then respectively provided on separate lines 259 and 257. This portion of Horn has nothing to do with a demultiplexer for separating individual audio channels received through a multichannel audio connection.

Accordingly, Applicant respectfully submits that claims 1, 3-7, 10, 12-13 and 16-21 are not anticipated by Horn and thus respectfully requests that the rejection of these claims under 35 U.S.C. §102 be withdrawn.

Claims 2, 11 and 27-30 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over Horn in view of Curry et al (U.S. ‘630, hereinafter “Curry”). Claims

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8-9 and 14-15 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over Horn in view of Ludwig (U.S. '539). Applicant respectfully traverses this rejection. Since each of these claims depends directly or indirectly from independent claim 1, 3, 10, 12, 16 or 17, the comments made above with respect to these base independent claims apply equally to these claims. Ludwig and Curry fail to remedy the above described deficiencies of Horn. Applicant thus respectfully requests that the rejection of claims 2, 8-9, 11, 14-15 and 27-30 under 35 U.S.C. §103 be withdrawn.

New Claims:

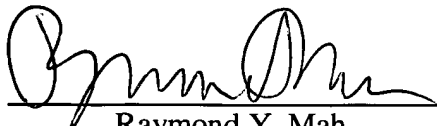
New claims 31-34 have been added to provide additional protection for the invention. Applicant submits that these claims are allowable for at least the reasons discussed above with respect to their respective base claim.

Conclusion:

Applicant believes that this entire application is in condition for allowance and respectfully requests a notice to this effect. If the Examiner has any questions or believes that an interview would further prosecution of this application, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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